CLAIMS

We claim:

1. A communication system comprising:

eyewear comprising a microphone and a speaker;

a wearer unit comprising a first transceiver and an interface unit coupled to the first transceiver, wherein the interface unit receives a first signal from the microphone and outputs a second signal to the speaker; and

a base station comprising a second transceiver for exchanging wireless signals with the first transceiver, wherein the wireless signals comprise information carried by the first and second signals.

2. The system of claim 1 further comprising a neck strap for carrying the first and second signals.

3. The system of claim 1, wherein the wearer unit comprises a cellular telephone.

4. The system of claim 1, wherein the wearer unit comprises a personal digital assistant.

5. The system of claim 1, wherein the wearer unit further comprises coded instructions stored in a memory coupled to a signal processor, and wherein the coded instructions control the signal processor to convert a voice command carried by the first signal into a control command.

6. The system of claim 5, wherein the control command controls a medical device.

7. The system of claim 1, wherein the base station further comprises an interface unit for exchanging signals between the base station and a telecommunication system.

8. The system of claim 1, wherein the wearer unit comprises a removable memory unit for recording information carried by the first signal.

9. The system of claim 1, wherein the base station comprises a removable memory unit for recording information carried by the first signal.

10. A method of using eyewear for two-way communication, comprising the acts of:

positioning a microphone and a speaker in eyewear;

receiving a voice carrying signal from the microphone;

transmitting the received voice carrying signal from a wearer unit associated with the eyewear to a base station coupled to a telecommunication system;

receiving a signal from the telecommunication system;

transmitting the received telecommunication system signal to the wearer unit; and

using the speaker to output the transmitted telecommunication system signal.

11. The method of claim 10, wherein the telecommunication system is a telephone system.

12. The method of claim 10, wherein the two-way communication is between a surgeon wearing the eyewear and a person outside a surgical theater in which the surgeon is located.

13. The method of claim 10, wherein the wearer unit is a cellular telephone.

14. The method of claim 10, wherein the wearer unit is a personal digital assistant.

15 A method of making a dictation transcript comprising the acts of:

receiving the dictation via a microphone positioned in eyewear;

storing the received dictation in a memory; and

transcribing the stored dictation.

16. The method of claim 15, wherein the eyewear is suitable for use in a surgical theater.

17. The method of claim 15, wherein storing the received dictation comprises recording the received dictation on a removable memory module inserted in a wearer unit associated with the eyewear.

18. The method of claim 15, wherein transcribing the stored dictation comprises the acts of:

using a computer to read the stored dictation; and

using the computer to transcribe the read dictation.

19. A method of controlling a device, comprising the acts of:

receiving a spoken command via a microphone positioned in eyewear;

using a signal processor to convert the received spoken command to a machine command used to control the device; and

outputting the machine command to the device.

20. The method of claim 19, wherein the device is a medical device.

21. The method of claim 19 further comprising the acts of:
receiving information from the device in response to the machine command;
outputting the received information as a synthesized voice via a speaker positioned in the eyewear.

22. The system of claim 1, wherein the eyewear comprises a video display.

23. A method of receiving data using eyewear, comprising the acts of:
coupling a wearer unit to the eyewear, wherein the eyewear comprises an output device;
sending a first wireless signal from the wearer unit to a base station, the first wireless signal comprising a request for the data;
receiving a second wireless signal from the base station to the wearer unit, the second wireless signal comprising the data; and
using the output device to output the data.

24. The method of claim 23, wherein the request is a digitized voice command, and wherein the data is converted from digital to analog form prior to output.

25. The method of claim 23, wherein the output device is a speaker.

26. The method of claim 23, wherein the output device is a video display.

27. The method of claim 23, further comprising generating the first wireless signal if the wearer unit enters a communication range of the base station.